

RECEIVED 1632
JAN 11 2007
TECH CENTER 1600/2900

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/963,679

DATE: 12/28/2001

TIME: 16:12:00

Input Set : A:\032301.232.seq.ST25.txt

Output Set: N:\CRF3\12282001\I963679.raw

ENTERED

RECEIVED

FEB 27 2002

TECH CENTER 1600/2900

3 <110> APPLICANT: Farwick, Mike, et al.
5 <120> TITLE OF INVENTION: NUCLEOTIDE SEQUENCES WHICH CODE FOR THE dep67 GENE
7 <130> FILE REFERENCE: 032301 WD 232
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/963,679
C--> 9 <141> CURRENT FILING DATE: 2001-09-27
9 <160> NUMBER OF SEQ ID NOS: 4
11 <170> SOFTWARE: PatentIn version 3.1
13 <210> SEQ ID NO: 1
14 <211> LENGTH: 1786
15 <212> TYPE: DNA
16 <213> ORGANISM: Corynebacterium glutamicum
18 <220> FEATURE:
19 <221> NAME/KEY: CDS
20 <222> LOCATION: (259)..(1560)
21 <223> OTHER INFORMATION:
24 <400> SEQUENCE: 1
25 cggcggttttc cgagcgggtg tetagcgcaa cgagtcgcga accgcgttgt tgggcctggc 60
27 tggcgagcat gtgttttggc acgtcgacgg catlgegtc ggacttaaaa ttcaacgcg 120
29 cagatggtgc aagcagctgt gaaatgagc gtaggcgcg gacgcgttcc agagaaaatg 180
31 caggcataac cccataaata ccttgatctt ccccggtgtc ctgcgccgtt gtccacccct 240
33 gcgtacataa taggacgc atg gga aaa cat gag gtt gct cag cag acg gtt 291
34 Met Gly Lys His Glu Val Ala Gln Gln Thr Val
35 1 5 10
37 cgg ggt cct tgg cgg gaa atg gaa gcg cag cgg cgt aaa gag ttg cgc 339
38 Pro Gly Pro Ser Pro Glu Met Glu Ala Gln Arg Arg Lys Glu Leu Arg
39 15 20 25
41 aag cac aag gcc att gcc act ggc ctg ttg att ttt gct gcc gct gta 387
42 Lys His Lys Ala Ile Ala Thr Gly Leu Leu Ile Phe Ala Ala Val
43 30 35 40
45 tat ttt ctt tgc cgt ttc gtg gag acc cgt cgg ggt gaa act gca gcg 435
46 Tyr Phe Leu Cys Arg Phe Val Glu Thr Arg Pro Gly Glu Thr Ala Ala
47 45 50 55
49 tgg gta ggt ttt gtg cgc gct gcg gca gag gcc gga atg att ggc ggg 483
50 Trp Val Gly Phe Val Arg Ala Ala Ala Glu Ala Gly Met Ile Gly Gly
51 60 65 70 75
53 ttg gcc gac tgg ttc gcg gtc acc gcg ctg ttc cgt cat cca ttg tgg 531
54 Leu Ala Asp Trp Phe Ala Val Thr Ala Leu Phe Arg His Pro Leu Trp
55 80 85 90
57 ctg cct att cgg cac act gcg att atc cgg cgc aag aaa gac cag tta 579
58 Leu Pro Ile Pro His Thr Ala Ile Ile Pro Arg Lys Lys Asp Gln Leu
59 95 100 105
61 ggt gag gcc tta agc ggg ttt gtg ggg gat aac ttc cta aat gcc cag 627
62 Gly Glu Ala Leu Ser Gly Phe Val Gly Asp Asn Phe Leu Asn Ala Gln
63 110 115 120
65 ctg att acg gaa aaa gtc tct cag gcg cgg atc cca gag cgc gcc ggg 675
66 Leu Ile Thr Glu Lys Val Ser Gln Ala Arg Ile Pro Glu Arg Ala Gly
67 125 130 135

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/963,679

DATE: 12/28/2001

TIME: 16:12:00

Input Set : A:\032301.232.seq.ST25.txt

Output Set : N:\CRF3\12282001\I963679.raw

69	gag	tgg	ctc	gcc	cag	ccg	gaa	aac	ggg	gag	aaa	gtt	tgg	cgc	gaa	gtc	723	
70	Glu	Trp	Leu	Ala	Gln	Pro	Glu	Asn	Gly	Glu	Lys	Val	Ser	Arg	Glu	Val		
71	140				145				150						155			
73	ggc	aaa	ttg	acc	gct	aat	att	gtg	cgc	gca	atc	gat	cgg	tca	gat	gct	771	
74	Gly	Lys	Leu	Thr	Ala	Asn	Ile	Val	Arg	Ala	Ile	Asp	Pro	Ser	Asp	Ala		
75					160				165						170			
77	gaa	gcg	gtg	att	aaa	tct	cgg	gtg	atc	gac	aag	ctt	gcg	gaa	ccc	acc	819	
78	Glu	Ala	Val	Ile	Lys	Ser	Ala	Val	Ile	Asp	Lys	Leu	Ala	Glu	Pro	Thr		
79					175				180						185			
81	tgg	ggc	cca	cca	gct	ggg	cgg	ttg	ctg	gaa	caa	ctc	ctc	gcc	gaa	gca	867	
82	Trp	Gly	Pro	Pro	Ala	Gly	Arg	Leu	Leu	Glu	Gln	Leu	Leu	Ala	Glu	Ala		
83					190				195						200			
85	aag	cgg	aac	cag	ttg	tcc	agg	aac	tgg	cgc	agt	ggc	tgc	aca	aaa	agg	915	
86	Lys	Pro	Asn	Gln	Leu	Ser	Arg	Asn	Ser	Arg	Ser	Gly	Cys	Thr	Lys	Arg		
87					205				210						215			
89	cgt	tgg	gct	ccc	gag	ccg	ctg	att	gat	cgc	ctg	ctc	aac	gag	cgc	cgc	963	
90	Arg	Trp	Ala	Pro	Glu	Pro	Glu	Pro	Leu	Ile	Asp	Arg	Leu	Leu	Asn	Glu	Arg	
91	220					225						230				235		
93	ccg	att	tgg	gcg	ccg	aaa	ttc	act	gcg	cag	ctg	gtc	agc	ggc	aaa	gtc	1011	
94	Pro	Ile	Trp	Ala	Pro	Lys	Phe	Thr	Ala	Gln	Leu	Val	Ser	Gly	Lys	Val		
95					240					245					250			
97	tat	gac	gag	gtc	ata	aaa	ttc	act	gaa	gcc	gtc	gct	gcc	gat	ccg	aac	1059	
98	Tyr	Asp	Glu	Val	Ile	Lys	Phe	Thr	Glu	Ala	Val	Ala	Ala	Asp	Pro	Asn		
99					255				260						265			
101	cac	gag	gcc	cgc	aaa	tgg	ctg	cgc	cga	ttc	ctt	aat	aaa	ttg	gcg	caa	1107	
102	His	Glu	Ala	Arg	Lys	Ser	Leu	Arg	Arg	Phe	Leu	Asn	Lys	Ser	Leu	Ala	Gln	
103					270				275						280			
105	gac	ctg	cag	cat	gac	cca	ggc	atg	att	att	aaa	gtt	gaa	gaa	atc	aaa	1155	
106	Asp	Leu	Gln	His	Asp	Pro	Gly	Met	Ile	Ile	Lys	Val	Glu	Glu	Ile	Lys		
107					285				290						295			
109	cgc	gac	atc	atg	ggc	tcc	ggc	gcc	atc	gcg	caa	gcc	gcg	cca	acc	atc	1203	
110	Arg	Asp	Ile	Met	Gly	Ser	Gly	Ala	Ile	Ala	Gln	Ala	Ala	Pro	Thr	Ile		
111	300					305					310					315		
113	tgg	gcg	tca	gcc	tcc	gag	tgg	ctc	att	gaa	tcc	gca	gaa	gat	gag	tca	1251	
114	Trp	Ala	Ser	Ala	Ser	Glu	Ser	Leu	Ile	Glu	Ser	Ala	Glu	Asp	Glu	Ser		
115					320					325					330			
117	tca	att	ctg	cgt	cgc	aaa	att	gcc	gaa	gca	gct	acc	agc	tgg	ggt	caa	1299	
118	Ser	Ile	Leu	Arg	Arg	Lys	Ile	Ala	Glu	Ala	Ala	Thr	Ser	Trp	Gly	Gln		
119					335					340					345			
121	aga	ttg	ctt	gtc	gac	gac	tcc	ctc	cgg	cat	tca	ctc	gac	acc	cgg	att	1347	
122	Arg	Leu	Leu	Val	Asp	Asp	Ser	Leu	Arg	His	Ser	Leu	Asp	Thr	Arg	Ile		
123					350				355						360			
125	acc	ggc	gcc	gct	gct	ttc	ctc	gcc	gac	aat	tac	gcc	ccc	gaa	gtc	acc	1395	
126	Thr	Gly	Ala	Ala	Ala	Phe	Leu	Ala	Asp	Asn	Tyr	Ala	Pro	Glu	Val	Thr		
127					365				370						375			
129	ggc	att	atc	tcc	gaa	acc	att	gaa	cga	tgg	gac	gct	gaa	gaa	gct	tca	1443	
130	Gly	Ile	Ile	Ser	Glu	Thr	Ile	Glu	Arg	Trp	Asp	Ala	Glu	Glu	Ala	Ser		
131	380					385					390				395			
133	gag	aaa	atc	gaa	ctc	atg	gtg	ggc	aaa	gac	ctc	caa	tac	atc	cgc	ctt	1491	

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/963,679

DATE: 12/28/2001
 TIME: 16:12:00

Input Set : A:\032301.232.seq.ST25.txt
 Output Set: N:\CRF3\12282001\I963679.raw

```

134 Glu Lys Ile Glu Leu Met Val Gly Lys Asp Leu Gln Tyr Ile Arg Leu
135          400          405          410
137 aat ggc aca att gta ggt gca tta gca gga ctg gcc att tac gct att      1539
138 Asn Gly Thr Ile Val Gly Ala Leu Ala Gly Leu Ala Ile Tyr Ala Ile
139          415          420          425
141 tcc cat atc ctc ttc gga gct taactaggag taaccatcat gtccgatgca      1590
142 Ser His Ile Leu Phe Gly Ala
143          430
145 aaagacgatt ccattctgtc caagtggagc aatgcagctt ccgagctcag cgggtgccgtc      1650
147 agtggagtag cgaagaagct ccgtgaagaa ctctctgaga aggaaacctt cagcaagctt      1710
149 aaaaccgaag ccagcgaagc cgtcgatcaa gcaaaagtcg gctcctacct agatgccggt      1770
151 aaggaattcg ccgcgc
154 <210> SEQ ID NO: 2
155 <211> LENGTH: 434
156 <212> TYPE: PRT
157 <213> ORGANISM: Corynebacterium glutamicum
159 <400> SEQUENCE: 2
161 Met Gly Lys His Glu Val Ala Gln Gln Thr Val Pro Gly Pro Ser Pro
162 1          5          10          15
165 Glu Met Glu Ala Gln Arg Arg Lys Glu Leu Arg Lys His Lys Ala Ile
166          20          25          30
169 Ala Thr Gly Leu Leu Ile Phe Ala Ala Val Tyr Phe Leu Cys Arg
170          35          40          45
173 Phe Val Glu Thr Arg Pro Gly Glu Thr Ala Ala Trp Val Gly Phe Val
174          50          55          60
177 Arg Ala Ala Ala Glu Ala Gly Met Ile Gly Gly Leu Ala Asp Trp Phe
178 65          70          75          80
181 Ala Val Thr Ala Leu Phe Arg His Pro Leu Trp Leu Pro Ile Pro His
182          85          90          95
185 Thr Ala Ile Ile Pro Arg Lys Lys Asp Gln Leu Gly Glu Ala Leu Ser
186          100          105          110
189 Gly Phe Val Gly Asp Asn Phe Leu Asn Ala Gln Leu Ile Thr Glu Lys
190          115          120          125
193 Val Ser Gln Ala Arg Ile Pro Glu Arg Ala Gly Glu Trp Leu Ala Gln
194          130          135          140
197 Pro Glu Asn Gly Glu Lys Val Ser Arg Glu Val Gly Lys Leu Thr Ala
198 145          150          155          160
198 145          150          155          160
201 Asn Ile Val Arg Ala Ile Asp Pro Ser Asp Ala Glu Ala Val Ile Lys
202          165          170          175
205 Ser Ala Val Ile Asp Lys Leu Ala Glu Pro Thr Trp Gly Pro Pro Ala
206          180          185          190
209 Gly Arg Leu Leu Glu Gln Leu Leu Ala Glu Ala Lys Pro Asn Gln Leu
210          195          200          205
213 Ser Arg Asn Ser Arg Ser Gly Cys Thr Lys Arg Arg Trp Ala Pro Glu
214          210          215          220
217 Pro Leu Ile Asp Arg Leu Leu Asn Glu Arg Arg Pro Ile Trp Ala Pro
218 225          230          235          240
221 Lys Phe Thr Ala Gln Leu Val Ser Gly Lys Val Tyr Asp Glu Val Ile
222          245          250          255

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/963,679

DATE: 12/28/2001

TIME: 16:12:00

Input Set : A:\032301.232.seq.ST25.txt

Output Set : N:\CRF3\12282001\1963679.raw

```

225 Lys Phe Thr Glu Ala Val Ala Ala Asp Pro Asn His Glu Ala Arg Lys
226      260      265      270
229 Ser Leu Arg Arg Phe Leu Asn Lys Leu Ala Gln Asp Leu Gln His Asp
230      275      280      285
233 Pro Gly Met Ile Ile Lys Val Glu Glu Ile Lys Arg Asp Ile Met Gly
234      290      295      300
237 Ser Gly Ala Ile Ala Gln Ala Ala Pro Thr Ile Trp Ala Ser Ala Ser
238 305      310      315      320
241 Glu Ser Leu Ile Glu Ser Ala Glu Asp Glu Ser Ser Ile Leu Arg Arg
242      325      330      335
245 Lys Ile Ala Glu Ala Ala Thr Ser Trp Gly Gln Arg Leu Leu Val Asp
246      340      345      350
249 Asp Ser Leu Arg His Ser Leu Asp Thr Arg Ile Thr Gly Ala Ala Ala
250      355      360      365
253 Phe Leu Ala Asp Asn Tyr Ala Pro Glu Val Thr Gly Ile Ile Ser Glu
254      370      375      380
257 Thr Ile Glu Arg Trp Asp Ala Glu Glu Ala Ser Glu Lys Ile Glu Leu
258 385      390      395      400
261 Met Val Gly Lys Asp Leu Gln Tyr Ile Arg Leu Asn Gly Thr Ile Val
262      405      410      415
265 Gly Ala Leu Ala Gly Leu Ala Ile Tyr Ala Ile Ser His Ile Leu Phe
266      420      425      430
269 Gly Ala
273 <210> SEQ ID NO: 3
274 <211> LENGTH: 28
275 <212> TYPE: DNA
276 <213> ORGANISM: Corynebacterium glutamicum
278 <400> SEQUENCE: 3
279 gaggtacctc caccctgcg tacataat
282 <210> SEQ ID NO: 4
283 <211> LENGTH: 28
284 <212> TYPE: DNA
285 <213> ORGANISM: Corynebacterium glutamicum
287 <400> SEQUENCE: 4
288 tgtctagact agttaagctc cgaagagg

```

28

28

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/963,679

DATE: 12/28/2001

TIME: 16:12:01

Input Set : A:\032301.232.seq.ST25.txt

Output Set: N:\CRF3\12282001\I963679.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date